

Whiteman AFB Annual Consumer Report on the Quality of Tap Water for 2003

This is an annual report on the quality of water delivered by Whiteman AFB. We continually monitor the drinking water for contaminants. Our water is safe to drink.

Under the Consumer Confidence Reporting Rule of the federal Safe Drinking Water Act (SDWA), community water systems are required to report this water quality information to the consuming public. Presented in this report is information on the source of our water, its constituents and the health risks associated with any contaminants. There were no contaminant level, monitoring or treatment technique violations for this reporting period.

Your drinking water comes from the Whiteman AFB Water Treatment Plant operated by 509th Civil Engineering Squadron. Our system has been assigned the identification number MO 1079501. The plant treats water from the Ozark Aquifer pumped from wells located on base. Your water is filtered and treated with chlorine to disinfect the water. These wells have been tested and the results are available from the 509th Medical Support Squadron, Bioenvironmental Engineering Flight (687-4324). If you would like to observe the decision-making processes that affect your drinking water quality or if you have any questions, the water plant can be reached at 687-1984.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels

over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

★ Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

★ Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

★ Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

★ Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

★ Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations

which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Please direct questions to Lt Heier or SSgt Houey at the 509th Medical Support Squadron, Bioenvironmental Engineering Flight (687-4324).

Table of Detected Contaminants

Contaminant	MCLG	MCL	Units	Level Found	Range	Violation	Sample Frequency (Latest)	Typical Source of Contamination/Remarks
Microbial								
Total Coliform	0	≤ 5	# positive samples	1 positive sample	month of July	No	weekly	Natural bacteria present in the environment
Turbidity	N/A	TT	NTU	0.047	0.0 – 0.20	No	12x daily	Soil Runoff/Indicator of filtration efficiency
Inorganic								
Barium, Dissolved	2	2	ppm	0.0796	0.0796	No	2002	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride	4.0	4.0	ppm	0.6700	0.67	No	2002	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
NITRATE + NITRITE (AS N)	10	10	ppm	0.0600	0.06	NO	2003	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

Copper	Action Level	Units	90 th Percentile	Sites exceeding AL	Collection Period	Typical Source of Contamination/Remarks
	AL= 1.3	ppm	0.092	0	2001	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservative

Contaminant	MCLG	MCL	Units	Level Found	Range	Violation	Sample Frequency (Latest)	Typical Source of Contamination/Remarks
Organic								
Total Trihalomethanes	0	100	ppb	5.0	0.7-5.0	No	2000	By-product of drinking water chlorination
Radiological								
Gross Alpha	0.0	15.0	pCi/L	4.9000	4.9	No	2000	Erosion of natural deposits
Unregulated								
Sulfate	250	N/A	ppm	37.1000	37.1	No	2002	Erosion of natural deposits

Optional Contaminants

<u>Inorganic</u>	<u>Units</u>	<u>Level Found</u>	<u>Range of Detections</u>	<u>Sample Year</u>
ALKALINITY, CAC03 STABILITY	ppm	245.0000	245	2002
CALCIUM	ppm	55.1000	55.1	2002
CHLORIDE	ppm	29.7000	29.7	2002
HARDNESS, TOTAL (AS CAC03)	ppm	240.0000	240	2002
MAGNESIUM	ppm	25.5000	25.5	2002
PH		7.5800	7.58	
POTASSIUM	ppm	3.8000	3.8	2002
SODIUM	ppm	32.9000	32.9	2002
SOLIDS, TOTAL DISSOLVED (TDS)	ppm	218.0000	218	1999
SULFATE	ppm	37.1000	37.1	2002
ZINC	ppb	6.0200	6.02	2002

*All sample monitoring frequencies are current and in accordance with state and federal regulations.

Definitions of Key Terms

Maximum Contaminant Level Goal (MCLG) - The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Million fibers per liter (MFL) - Millions of asbestos fibers per liter of water.

Variances and exemptions - State or EPA permission not to meet an MCL or treatment technique under certain conditions.

Parts per billion (ppb) or Micrograms per liter (µg/L) - One part per billion corresponds to one part (amount) per billion parts. As an example, a single dollar in \$1,000,000,000 is 1 ppb.

Picocuries per liter (pCi/L) - Picocuries per liter is a measure of the radioactivity in water.

Milliroentgens equivalent man per year (mRem/yr) - Milliroentgens equivalent man per year is an estimated dose of beta radiation to a human.

Parts per Million (ppm) or Milligrams per liter (mg/L) - One part per million corresponds to one part (amount) per million parts. As an example; a single dollar in \$1,000,000 is 1 ppm.

Action Level (AL) - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT) - A required process intended to reduce the level of a contaminant in drinking water.

Nephelometric Turbidity Units (NTU) - A measure of the cloudiness of water.

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